

**TRENCH GROWTH TECHNIQUES  
USING SELECTIVE EPITAXY**

Abstract of the Disclosure

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A masking material (14) is formed on a foundation layer (12) and a substrate (10). A mask (16) is disposed onto the masking material (14) where a trench (26) is desired to be formed. An etch step removes all of the masking material (14) except at regions where the mask (16) was formed leaving a protruding portion (18) with an opening (20) on either side. An epi layer (24), is grown on the foundation layer (12) adjacent to the protruding portion (18) in the opening (20). A wet oxide etch process is used to remove the protruding portion (18) leaving a trench (26) formed in the epi layer (24). To complete the process, a silicon wet etch process is used to round off the corners at an edge (28) of the trench (26).

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